

Series

UVC MT

Type: UV traditional

Printing process: screen printing

Ink type: one-component

Finish: matt

Materials: Cardboard, Coated paper, Paper, rigid PVC, Self-adhesive PVC, treated Polyester, Wood

Main features:

- . Doesn't contain NVP (N-vinyl-2-pyrrolidone)
- . Matt appearance (MT)
- . Suitable for printing "roll to roll" labels
- . Excellent reactivity
- . Low thixotropic viscosity ink, ready to use
- . Good flexibility
- . Good abrasion resistance
- . Excellent printability
- . Low shrinkage = low EDGE CURL = no curling of the paper

Due to the variety of papers used for "roll to roll" printing, it is recommended to carry out preventive tests before production.

The UVC MT series can be printed with screen printing cliches, mounted with fabric from 120 to 180 threads (ideal 150.31).

Please remember the larger is the mesh opening, the greater is the thickness of deposited ink, consequently, the greater is the energy (UV radiation) which must be produced to obtain the maximum polymerization.

Due to the versatility of use of this ink, and the possible differences in the quality of the supports used, pre-tests are suggested.

If necessary, help the adhesion of the ink by changing the surface tension of the various substrates with specific treatments.

If it's necessary to print very absorbent papers, we recommend adding to the ink the transparent UVC MT TP base, which allows the ink not to completely penetrate the paper and improve the photoinitiating.

The ink of the UVC MT Series has good flexibility and accepts the hot overprinting of metal foils, as well as the overprinting of UV screen printing lacquers.

Certifications: CLP/GHS (EC 1272/2008), Conflict minerals free, EN 71-3, Reach (EC 1907/2006), RoHS

The EN 71:3 Directive is valid for standard shades of one component inks, two component inks, Ink system and Process colors, HD shades and for all not standard shades which do not contain metallic shades, metallic pastes or fluorescent pigments or inks.

In order to clarify any doubt on not standard shades, it is always recommended to provide us a specific request.

Eco-sustainability (free of): Animal origin ingredients, Azo dyes, Bisphenol A (BPA), Cyclohexanone, Formaldehyde, G-B Ester, Latex, Melamine, PAH, Persistent organic pollutants, Phthalates (listed in RoHS directive)

Note: shades in the fluorescent color chart contain formaldehyde.

Note: inks are formulated without aromatics naphthas, potential IPA contaminations are minimal.

Outdoor resistance (years): 1

Not suitable for long outdoor applications.

The pigments used have a solidity from 6 to 8 DIN.

In case of mixing with the transparent bases 70 TR or TP, or with the white 160 or 60 BN, the light fastness and atmospheric

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agents decrease.

If you want to increase the outdoor solidity, it's recommended to add 5-7% of UV adsorber to the ink.

Drying process: UV

The UVC MT series ink solidifies (polymerizes) only with UV radiation (photo-initiation).

The total polymerization of the ink takes place largely within a wide range of energy emission. Polymerization also depends on the substrate on which it is printed, the thickness of the ink, the speed of the conveyor belt and the lamps used.

The wavelength (energy) required for photo-initiation goes from 250-400 nm (ideal 365 nm) obtainable with a mercury pressure lamp of 80-200 W/cm. At a tape speed of 10 mt/mi.

The polymerization process through UV energy occurs not immediately, but progressively over time.

The process needs 1-2 days to be complete.

Mechanical and chemical solidity:

Alcohol	good
Surface hardness (Abrasion)	2H

To obtain maximum adhesion it is important to take into consideration the surface tension of the substrate, which must be greater than 38 N/m as the minimum limit. Ideal value: > 40 N/m

The laboratory tests were carried out with a screen printing cliché with a 150.31 thread fabric.

To obtain a certain value of the results of mechanical and chemical solidity, it is advisable to carry out the tests at least 48 hours after printing.

Colours range: EXTRA - M, HD, INK SYSTEM, QUADRICROMIA

165	170	160 HD	165 HD	165 HD-00	10 GL	11 GS	12 AR	21 RS	22 RC
25 MG	27 VT	32 BL	40 VR	60 BN	65 NR	70 TR	1080	1081	1082
1083	TP								

Please refer to the Ink System ink color charts.

The Ink System are 12 colour shades for mixing of RAL, PMS and HKS colours.

The metallic shades are available only by mixing the relative pastes with the Transparent Base UVC MT 70 TR.

Gold paste 75 10-20%

Gold paste 76 10-20%

Gold paste 77 10-20%

Bronze paste 78 10-20%

Silver paste 79-050 10-15%

The metallic pastes composed with the relative transparent base UVC MT 70 TR, due to their particular composition, can oxidize.

The pot-life of the compounded METALLIC PASTES is about 5-6 working hours.

In the Ink System color chart are present the shades.

1080 yellow, 1081 magenta, 1082 blue, 1083 black, TP paste (CMYK), necessary for making four-color prints.

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The following shades are also included:

White 160 HD
 Black 165 HD
 Black 165 HD-00

Auxiliaries and additives:

UV-DIL universal thinner	2,5%	(if necessary)
UV 94 F photoinitiator	2,5%	(reactivity) 5% max
UV 292 photoinitiator	2,5%	(for whites and transparents) 5% max
UV 527 photoinitiator	2,5%	(for colors) 5% max
UV 3 levelling agent	0,5%	
UV-CL adhesion promoter	2,5%	5% max
Antistatic UV	1%	

Ink removal:

DACS solvent
 Lavaggio telai solvent
 Aprimaglia Spray

STORAGE:

Please keep the cans in a dark place, at temperature of 15-25°C.

If the recommended temperature is higher than the suggested one or the cans are not completely closed, the shelf life and the qualities are drastically reduced.

CLASSIFICATION:

Before using this ink, consult the relevant safety data sheets available.

The safety data sheets provided comply with the REACH regulation (EC 1907/2006).

The hazard classification and related labelling are compliant with the CLP / GHS regulation (EC 1272/2008).

OTHER INFORMATION:

For more information on SERICOM ITALIA srl products, refer to the website www.sericom.it

NOTE:

Our technical consultancy activity, carried out orally, in writing or through tests or experiments, takes place on the basis of our best knowledge.

However, the same must be considered as information without any binding value, also as regards any third party industrial property rights.

This does not exempt the customer from performing his own checks on the products supplied by us in order to estimate the suitability or otherwise of the procedures and for the purposes intended.

The application, use and transformation of the products take place outside our control possibilities and therefore fall under the exclusive responsibility of the customer.